



SAFETY DATA SHEET

1. Identification

Product identifier Titanium® 5

Other means of identification

Item Code AV4135

Synonym(s) Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine (Modified Live Virus)

Recommended use Not available.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Diamond Animal Health, Inc.
Des Moines, Iowa 50327 USA

Distributor:

Company Name Elanco Animal Health
2500 Innovation Way
Greenfield, IN 46140 USA

Phone: 1-877-Elanco1 (1-877-352-6261)

Emergency Telephone Numbers: Elanco Product Technical Support / Human or Animal Exposure Reporting
1-888-545-5973
Transportation Emergency Telephone: CHEMTREC: 1-800-424-9300

Email: lilly_msds@lilly.com

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Not assigned.

Response Not assigned.

Storage Not assigned.

Disposal Not assigned.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information In the event of accidental injection, an allergic reaction may occur.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|------------------|--------------------------|------------|---|
| IBR-BVD-PI3-BRSV | Titanium® 5 | N/A | * |
| Sterile diluent | | | * |

* All components are nonhazardous and/or below required disclosure limits.

Composition comments This product contains 2 components.
Solid: (Titanium 5)
Liquid: (Sterile diluent)

4. First-aid measures

General information NOT FOR HUMAN USE!

| | |
|---|--|
| Inhalation | Move to fresh air. Oxygen or artificial respiration if needed. IF exposed or concerned: Get medical advice/attention. |
| Skin contact | Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation develops and persists. |
| Eye contact | In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| Ingestion | If conscious, give the victim plenty of water to drink. Never give anything by mouth to a victim who is unconscious or is having convulsions. Consult a physician. |
| Most important symptoms/effects, acute and delayed | In the event of accidental injection, an allergic reaction may occur. |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. |

5. Fire-fighting measures

| | |
|--|--|
| Suitable extinguishing media | Water. Carbon dioxide (CO ₂). Dry chemical. |
| Unsuitable extinguishing media | Not available. |
| Specific hazards arising from the chemical | Fire or excessive heat may produce hazardous decomposition products. |
| Special protective equipment and precautions for firefighters | Wear self-contained breathing apparatus and protective clothing. |

6. Accidental release measures

| | |
|--|---|
| Personal precautions, protective equipment and emergency procedures | Avoid contact with skin, eyes and clothing. Wear suitable protective clothing, gloves and eye/face protection. |
| Methods and materials for containment and cleaning up | Avoid the generation of dusts during clean-up. Clean contaminated surface thoroughly. Flush with plenty of water. Soak up with inert absorbent material. Transfer to a container for disposal. For waste disposal, see Section 13 of the SDS. |
| Environmental precautions | Avoid release to the environment. |

7. Handling and storage

| | |
|---|---|
| Precautions for safe handling | Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Avoid breathing mists or aerosols of this product. |
| Conditions for safe storage, including any incompatibilities | Store at: 2 - 8 C. Do not allow material to freeze. Do not store in open or unlabelled containers. Use entire contents when first opened. |

8. Exposure controls/personal protection

| | |
|--|--|
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Appropriate engineering controls | General ventilation normally adequate. |
| General hygiene considerations | Wash hands after handling. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | Safety glasses with side-shields. |
| Skin protection | |
| Hand protection | Chemical resistant gloves. |
| Other | Chemical-resistant gloves and impermeable body covering to minimize skin contact. |
| Respiratory protection | In case of inadequate ventilation, use respiratory protection. (i.e. product breakage) Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |
| Thermal hazards | Not available. |

9. Physical and chemical properties

| | |
|-----------------------|--|
| Appearance | Liquid in vial or syringe (Sterile diluent) Dessicated solid in vial (Titanium 5) |
| Physical state | Solid, Liquid. |

| | |
|---|--------------------------------|
| Form | Dessicated solid with diluent. |
| Color | No data available. |
| Odor | No data available. |
| Odor threshold | No data available. |
| pH | No data available. |
| Melting point/freezing point | No data available. |
| Initial boiling point and boiling range | No data available. |
| Flash point | No data available. |
| Evaporation rate | No data available. |
| Flammability (solid, gas) | No test data available. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | No data available. |
| Flammability limit - upper (%) | No data available. |
| Explosive limit - lower (%) | No data available. |
| Explosive limit - upper (%) | No data available. |
| Vapor pressure | No data available. |
| Vapor density | No data available. |
| Relative density | No data available. |
| Solubility(ies) | |
| Solubility (water) | No data available. |
| Partition coefficient (n-octanol/water) | No data available. |
| Auto-ignition temperature | No data available. |
| Decomposition temperature | No data available. |
| Viscosity | No data available. |
| Other information | |
| Density | No data available. |
| Explosive properties | No data available. |
| Oxidizing properties | No data available. |
| Percent volatile | No data available. |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |
| Conditions to avoid | Avoid high temperatures. Do not allow material to freeze. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | Hazardous decomposition products formed under fire conditions. |

11. Toxicological information

Information on toxicological effects

| | |
|--|--|
| Acute toxicity | Based on the nature of this substance and the known health effects of the components, this preparation is considered unlikely to produce health effects through relevant routes of occupational exposures. In the event of accidental injection, an allergic reaction may occur. |
| Skin corrosion/irritation | No data available. |
| Serious eye damage/eye irritation | No data available. |
| Respiratory or skin sensitization | |
| Respiratory sensitization | No data available. |
| Skin sensitization | No data available. |

| | |
|-------------------------------|--|
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Carcinogenicity | No ingredients present at 0.1% (one-tenth percent) or greater are listed by IARC, NTP, ACGIH, or OSHA. |

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

| | |
|---|---|
| Reproductive toxicity | No data available. |
| Specific target organ toxicity - single exposure | No data available. |
| Specific target organ toxicity - repeated exposure | No data available. |
| Aspiration hazard | No aspiration toxicity classification |
| Further information | The active components of this vaccine are not considered to be pathogenic for healthy individuals even if inhaled, ingested or applied to the eyes or skin. |

12. Ecological information

| | |
|--------------------------------------|---|
| Ecotoxicity | The environmental characteristics of this material have not been fully evaluated. Ecological injuries are not known or expected under normal use. |
| Persistence and degradability | No data is available on the degradability of this product. |
| Bioaccumulative potential | No data available for this product. |
| Mobility in soil | No data available. |
| Other adverse effects | Not available. |

13. Disposal considerations

| | |
|--|--|
| Disposal instructions | Containers and unused contents should be burned under controlled conditions. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. |
| Contaminated packaging | Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

| | |
|---|-----------------------------------|
| DOT | Not regulated as dangerous goods. |
| IATA | Not regulated as dangerous goods. |
| IMDG | Not regulated as dangerous goods. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not available. |

15. Regulatory information

| | |
|---|--|
| US federal regulations | |
| TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) | Not regulated. |
| CERCLA Hazardous Substance List (40 CFR 302.4) | Not listed. |
| SARA 304 Emergency release notification | Not regulated. |
| US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | Not listed. |
| Superfund Amendments and Reauthorization Act of 1986 (SARA) | |
| Hazard categories | Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No |

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

| | |
|------------------------------|---|
| Issue date | 02-26-2014 |
| Version # | 01 |
| List of abbreviations | IBR-BVD-PI3-BRSV: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine (Modified Live Virus) |
| Disclaimer | As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product. For additional information contact: Elanco Animal Health 00+1+877-352-6261 00+1-800-428-4441 |